

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WILLIAM M. HEYN

Appeal No. 1997-1285
Application No. 08/307,153¹

ON BRIEF

Before GARRIS, WARREN, and TIMM, Administrative Patent Judges.

TIMM, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 20 and 26 through 37, which are all of the claims pending in this application².

¹ Application filed September 16, 1994. This application is a division of 08/135,655 filed October 14, 1993, which is a continuation of 07/741,235, filed August 5, 1991, which is a continuation of 07/451,811, filed December 18, 1989.

² The brief at page 2 states that claims 1 and 22-25 have been withdrawn from consideration and that claims 2-18, 19 and 21 have been canceled. However, claims 1 and 22-25 have also been canceled. See the amendment filed September 7, 1995 (paper no. 6).

BACKGROUND

The appellant's invention relates to a method of forming a container closure to be subsequently attached to the flange of a separately formed container. The closure includes an annular frame member which is compatible in shape with the rim of the container and designed for attachment to the container. Within the frame, there is a disk portion formed from sheet material. Appellant calls the disk portion an end panel. This end panel is designed with a pull tab. During use, the tab is pulled to remove the end panel from the closure to allow access to the contents of the container. At its broadest level, the method of making the closure involves forming the end panel, inserting it into an injection mold and injecting plastic into the mold to both form the frame and attach the frame to the end panel. This process is generally referred to in the art as insert injection molding. Claims 20 and 26 are representative of the subject matter on appeal and are reproduced below:

20. A method of forming a container closure for subsequent attachment to a separate preformed container having a flange for securing the closure thereto, said method including the steps of:

- a) forming an end panel in the shape of a planar disk;
- b) inserting said disk into a mold having a mold cavity for forming a frame member shaped to be secured to the flange of a container;
- c) injecting plastic material into said mold cavity for forming said frame member and for attaching said end panel to said frame member,

d) wherein the step of forming said end panel includes the step of providing a pull tab extending co-planar with said disk, and the step of forming said frame member includes the step of providing said frame member with an upstanding rib means extending about an upper surface of said frame member for facilitating stacking of a plurality of said closures and for protecting said pull tab.

26. A method of forming a closure for subsequent attachment to a separate preformed container, the method comprising the steps of:

forming an end panel having an integral pull tab at a periphery thereof; the method being characterized by the steps of inserting said end panel into a mold having a cavity for forming a frame member shaped to be permanently secured to a flange of the container; and injecting a plastic material into said mold cavity for forming said frame member and for attaching said end panel to said frame member.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Suzuki et al. (Suzuki)	5,013,516	May 7, 1991 (filed May 25, 1984)
French Patent (FR 196)	2,380,196	Sep. 8, 1978

Claims 20 and 26-37 stand rejected under 35 U.S.C. § 103 as being unpatentable over Suzuki in view of FR 196.

OPINION

Appellant groups the claims as follows:

- C Claim 20 stands alone
- C Claim 26, with claims 27, 28, 31, 32, 34, 36, 37 standing with 26

- Ⓒ Claim 29 stands separate from parent claim 26
- Ⓒ Claim 30 stands separate from parent claim 26
- Ⓒ Claim 33 stands separate from parent claim 26
- Ⓒ Claim 36 stands separate from parent claim 26

As appellant has provided arguments meeting the requirements of 37 CFR § 1.192(c)(8), we adopt appellant's groupings. We start our analysis with claim 26.

Claim 26 is directed to a process of insert injection molding a frame around an end panel having an integral pull tab at its periphery. As the examiner explains in the rejection (page 3 of the Answer), Suzuki teaches placing an insert in a mold cavity and injection molding a peripheral frame and other elements on the insert during forming of a container lid. FR 196 shows a conventional container closure including an end panel insert with pull tab which is attached to a previously injection molded peripheral rim. According to FR 196, the separately formed end panel insert and peripheral rim are bonded together by heat sealing or adhesive bonding (translation: paragraph bridging pages 2 and 3). The examiner concludes that it would have been obvious to make the container lid with the conventional features of FR 196 by the process steps of Suzuki.

Appellant makes two general arguments. First, in the brief at page 4, appellant argues that Suzuki does not and cannot provide the end panel with a pull tab and FR 196 teaches a different process of making. Second, in the brief at pages 4 and 5, appellant argues that the combination of

teachings is not possible without destroying what the examiner proposes to retain. Neither of these arguments is persuasive with regard to claim 26.

In making a determination of obviousness, one must look at what the combined teachings of the references would have suggested to those of ordinary skill in the art. “The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.” *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981).

Appellant’s first argument, that the primary reference doesn’t teach the claimed product design and the secondary reference doesn’t teach the claimed process, ignores what the combination of the two references together would have suggested to one of ordinary skill in the art of making container closures. “[O]ne cannot show non-obviousness by attacking references individually where, as here, the rejections are based on combinations of references.” *Id.* 642 F.2d at 426, 208 USPQ at 882. As the examiner points out in the answer at page 6, Suzuki establishes the conventional nature of the process steps. FR 196 establishes the conventional nature of the product shape. The question is whether one of ordinary skill in the art of forming container closures would have found it obvious to form the closure of FR 196 by the insert injection molding process of Suzuki. Suzuki specifically discusses the

conventional bonding method used by FR 196 in which an end panel sheet is bonded to a previously injection molded outer layer in the Background of the Invention at column 2, lines 40-51. In column 3, lines 49-54, Suzuki lists several advantages for replacing the conventional bonding process with an insert injection molding process including a reduction in process steps and thus a reduction in manufacturing cost. Suzuki, therefore, expressly suggests a reason to replace the conventional bonding method of FR 196 with the insert injection molding method. Economic factors can render a claimed invention obvious. *In re Thompson*, 545 F.2d 1290, 1294, 192 USPQ 275, 277 (CCPA 1976).

In regard to the second argument, the combination does not destroy what the examiner proposes to retain. The examiner does not suggest retaining the handle of Suzuki in the product of the combination. The art combination results in the formation of the product of FR 196 by the insert injection molding process of Suzuki. The examiner is not suggesting that the end panel of FR 196 be physically placed in the mold of Suzuki. One of ordinary skill in the art would have simply used an injection mold with a cavity in the shape of the frame or peripheral portion 1 of FR 196 and placed the panel 2 in that mold and then injected plastic into the mold cavity to form the frame in the shape of peripheral portion 1 of FR 196. We conclude that the examiner has made out a *prima facie* case of obviousness with respect to the subject matter of claim 26.

Claim 29 is dependent on claim 26 and further requires that the injection mold cavity include a portion for forming a radially directed shelf portion on the frame member and to which the end panel is

joined. As pointed out by appellant on page 5 of the brief, FR 196 shows such a radially directed shelf portion. FR 196 denotes the shelf portion as inner rim 3 in the figures. When forming the closure of FR 196 by insert injection molding, as suggested by the art combination, the injection mold cavity would necessarily have a cavity for forming the inner rim 3 of FR 196. We conclude that the examiner has made out a *prima facie* case of obviousness with respect to the subject matter of claim 29.

Claim 30 is dependent on claim 26 and further requires that the mold cavity include a portion for forming an upstanding rib member on the upper surface of the frame member. In the rejection, the examiner states that the upstanding rib member is deemed an obvious improvement for the lid and is conventional in the art (Answer page 4).

Where the appellant has failed to challenge a fact officially noticed or stated to be well-known or conventional in the art and it is clear that the appellant has had an opportunity to make a challenge, the fact asserted will be taken as admitted. *Cf. In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 421 (CCPA 1970); *In re Chevenard*, 139 F.2d 711, 712-13, 60 USPQ 239, 241 (CCPA 1944).

The examiner first made the statement of conventionality in the final rejection. Appellant had an opportunity to challenge the statement both in the after-final response and also in the brief. Yet appellant presented no such challenge. Because appellant has not challenged the statement that upstanding ribs are conventional in the art, the subject matter stated to be conventional is taken to be admitted prior art.

We agree with the examiner that one of ordinary skill in the art would have found it obvious to include conventional upstanding ribs on the rim 1 of FR 196 and would have formed these upstanding ribs during the injection molding of the frame as taught by the combination of art to obtain a closure with a well-known rib design for well-known advantages. We conclude that the examiner has made out a *prima facie* case of obviousness with respect to the subject matter of claim 30.

Independent Claim 20, similarly to claim 30, recites forming a frame member with an upstanding rib means extending about an upper surface of said frame member for facilitating stacking of a plurality of closures and for protecting the pull tab. As explained above with respect to claim 30, the examiner has asserted that such upstanding rib members are conventional in the art and appellant has not challenged this assertion. The fact is taken as admitted and we conclude that adding the well-known feature of the rib to the injection molded rim of the art combination would have been obvious to obtain the known advantages of the well-known rib design.

Claim 20 is directed to a method of insert injection molding a frame around an end panel which is in the shape of a planar disk and includes a co-planar pull tab. We note that FR 196 teaches such an end panel at 2. Therefore, the art combination would have resulted in injection molding around such a planar disk with pull tab as claimed. We conclude that the examiner has made out a *prima facie* case of obviousness with respect to the subject matter of claim 20.

Claim 33 is dependent on claim 26 and further requires that the mold cavity be further provided with a portion for forming, during injection molding, a partial sealing strip overlying the end panel for preventing, in use, complete separation of the end panel from the frame member. As pointed out by appellant in the brief at page 5, this feature is absent from the combined prior art; neither Suzuki nor FR 196 shows this feature.

The examiner states that the sealing strip reads on the fold 19 of Suzuki. In regard to this claim, the examiner is mixing and matching the product designs of Suzuki and FR 196 in a way not suggested by the references. No reason, suggestion, or motivation for mixing these design features is offered by the examiner and we ourselves see no reason why one of ordinary skill in the art would have added the fold of Suzuki to the product design of FR 196. Therefore, we conclude that the examiner has failed to establish a *prima facie* case in regard to the subject matter of claim 33.

Claim 36 is dependent on claim 26 and further requires a step of applying a sealing strip for bridging a joint line between the frame member and the end panel. Appellant states in the brief at page 6 that the sealing strip of claim 36 is for a similar purpose as the sealing strip discussed above with regard to claim 33. Neither Suzuki nor FR 196 suggest a sealing strip *applied for bridging a joint line* between the frame member and end panel. The fold of Suzuki is part of the injection molded frame, the fold is not applied to bridge the area where the frame member and end panel meet. Even if the fold were a sealing strip as claimed, there would have been no reason, suggestion or motivation to

incorporate the fold of Suzuki into the product design of FR 196. Therefore, we must conclude that the examiner has failed to establish a *prima facie* case in regard to the subject matter of claim 36.

In view of the above discussion, we conclude that the examiner has established a *prima facie* case of obviousness with respect to the subject matter of claims 20, 26, 29, 30 and the claims that stand or fall with those claims, but has failed to establish a *prima facie* case of obvious with respect to the subject matter of claims 33 and 36.

CONCLUSION

To summarize, the decision of the examiner to reject claims 20 and 26-32, 34, 35, and 37 under 35 U.S.C. § 103 is affirmed. The decision of the examiner to reject claims 33 and 36 is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

BRADLEY R. GARRIS
Administrative Patent Judge

CHARLES F. WARREN
Administrative Patent Judge

CATHERINE TIMM
Administrative Patent Judge

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